

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A track assembly for use in a utility cart, the track assembly comprising:

a frame including a tensioning structure adjustably spacing a first wheel a distance from a second wheel;

a top tandem arm pivotally connected to said frame at a pivot member such that said top tandem arm will pivot freely relative to said frame in a substantially vertical plane, said first wheel being directly connected to a first end of said top tandem arm at one end of said frame;

a bottom tandem arm having a front portion, a rear portion, a top portion, and a bottom portion, said top portion of said bottom tandem arm being pivotally connected to a second end of said top tandem arm, said pivot member being positioned between said first end and said second end of said top tandem arm;

a front tandem arm idler wheel operably connected to said front portion of said bottom tandem arm;

a rear tandem arm idler wheel operably connected to said rear portion of said bottom tandem arm; and

a belt in engagement with said tandem arm idler wheels and said first and second wheels.

2. (Original) A utility cart for transporting agricultural implements, said cart comprising:

a pair of elongated rails suitable for supporting agricultural implements, said rails being substantially parallel to each other;

a transverse rear axle rigidly mounted to said rails;

a first rear top tandem arm and a second rear top tandem arm pivotally mounted at opposite ends of said rear axle such that said top rear tandem arms can pivot in a plane substantially parallel to said elongated rails, each of said tandem arms having a front portion and a rear portion;

a first rear bottom tandem arm pivotally mounted to said front portion of said first rear top tandem arm such that said first rear bottom tandem arm can pivot longitudinally with respect to said first rear top tandem arm, said first rear bottom tandem arm having a front portion and a rear portion;

a second rear bottom tandem arm pivotally mounted to said front portion of said second rear top tandem arm such that said second rear bottom tandem arm can pivot longitudinally with respect to said second rear top tandem arm, said second rear bottom tandem arm having a front portion and a rear portion;

rear tandem arm wheels attached to said front and rear portions of said first and second rear bottom tandem arms;

a first rear idler wheel rotatably mounted to said rear portion of said first rear top tandem arm for rotation in a plane substantially parallel to said rails;

a second rear idler wheel rotatably mounted to said rear portion of said second rear top tandem arm for rotation in a plane substantially parallel to said rails;

a hitching frame for connection to a towing vehicle, said hitching frame being pivotally connected to a front portion of said elongated rails;

a transverse front axle rigidly mounted to said hitching frame;

a first front top tandem arm and a second front top tandem arm pivotally mounted at opposite ends of said front axle such that said top front tandem arms can pivot in a plane substantially parallel to said elongated rails, each of said front tandem arms having a front portion and a rear portion;

a first front bottom tandem arm pivotally mounted to said rear portion of said first front top tandem arm such that said first front bottom tandem arm can pivot longitudinally with respect to said first front top tandem arm, said first front bottom tandem arm having a front portion and a rear portion;

a first front idler wheel rotatably mounted to said front portion of said first front top tandem arm for rotation in a plane substantially parallel to said rails;

a second front idler wheel rotatably mounted to said front portion of said second front top tandem arm for rotation in a plane substantially parallel to said rails;

front tandem arm wheels attached to said front and rear portions of said first and second front bottom tandem arms;

a first tension bar of adjustable length spanning between said first front top tandem arm and said first rear top tandem arm;

a second tension bar of adjustable length spanning between said second front top tandem arm and said second rear top tandem arm;

a first continuous belt looped around said first front and first rear idler wheels, said first continuous belt having a ground engaging surface for supporting the weight of the utility cart and an interior surface engaging said front and rear tandem arm idler wheels; and

a second continuous belt looped around said second front and second rear idler wheels, said second continuous belt having a ground engaging surface for supporting the weight of the utility cart and an interior surface engaging said front and rear tandem arm idler wheels.

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Currently Amended) A track assembly for distributing weight of an implement frame as it is towed across irregular ground, the track assembly comprising:
a wheel frame adapted for supporting an implement frame;
a first tandem arm directly connected to an axle positioned in said wheel frame forming a pivot member for freely rocking generally in a vertical plane about a first pivot axis;

a first wheel positioned at one end of said wheel frame and operably connected to said wheel frame by direct attachment to a first end of said first tandem arm and a second wheel operably connected to said wheel frame;

a continuous ground-engaging belt trained around said first and second wheels and defining an upper run and a lower run, said lower run in contact with the ground;

a first idler wheel structure supported by a second end of said first tandem arm, the pivot member being positioned between the first end and the second end of the tandem arm such that said first idler wheel structure and said first wheel rock about said first pivot axis in a reciprocating manner to maintain a desired distribution of weight between said first wheel and said first idler wheel structure, said first idler wheel structure being in contact with said lower run between the first and second wheels; and

a hitch member connected to said wheel frame for towing said wheel frame forwardly over the ground, wherein said lower run rolls in contact with the ground and said idler wheel structure moves vertically with the first tandem arm as said wheel frame is towed forwardly over the irregular ground.

7. (Previously Presented) The track assembly as set forth in claim 6, further comprising a second tandem arm supporting a second idler wheel structure, said second tandem arm pivotally connected to said wheel frame for rocking in a generally vertical plane about a second pivot axis, said second idler wheel structure contacting said lower run between said first and second wheels.

8. (Previously Presented) The track assembly as set forth in claim 7, wherein said first and second idler wheel structures include a plurality of idler wheels.

9. (Previously Presented) The track assembly according to claim 8, wherein said idler wheels are mounted on lower tandem arms pivotally connected to said first and second tandem arms.

10. (Currently Amended) The track assembly according to claim 9, wherein said second pivot tandem arm supports said second wheel.

11. (Previously Presented) The track assembly as set forth in claim 7, wherein said wheel frame includes a tension bar structure for spacing said first and second wheels, and wherein said first and second tandem arms are pivotally connected to said tension bar structure.

12. (Previously Presented) The track assembly as set forth in claim 1 wherein said first wheel is a large idler wheel.

13. (Currently Amended) The track assembly as set forth in claim 1, wherein said front tandem arm idler wheel pivots transversely in a generally vertical plain plane relative to said bottom tandem arm; and wherein said rear tandem arm idler wheel pivots transversely in a generally vertical plain plane relative to said bottom tandem arm.

14. (Currently Amended) A track assembly for distributing weight of an implement frame, the track assembly comprising:

 a wheel frame adapted for supporting an implement frame;

 a first tandem arm directly connected to an axle positioned in said wheel frame forming a pivot member for freely rocking generally in a vertical plane about a first pivot axis;

 a first wheel positioned at one end of said wheel frame and operably connected to said wheel frame by direct attachment to a first end of said first tandem arm and a second wheel operably connected to said wheel frame;

 a continuous ground-engaging belt trained around said first and second wheels and defining an upper run and a lower run, said lower run in contact with the ground;

 and

 a first idler wheel structure supported by a second end of said first tandem arm, the pivot member being positioned between the first end and the second end of the tandem arm such that said first idler heel wheel structure and said first wheel freely rock about said first pivot axis in a reciprocating manner to maintain a desired distribution of weight between said first wheel and said first idler wheel structure, said first idler wheel structure being in contact with said lower run between the first and second wheels.

15. (Previously Presented) The track assembly of Claim 1, wherein said top tandem arm and said bottom tandem arm pivot in a first plane, and wherein said assembly further comprises an axle extending perpendicular to said bottom tandem arm and operably connected between said bottom tandem arm and at least one of said idler wheels, said axle being pivotally connected to said bottom tandem arm for pivoting in a second plane which is perpendicular to said first plane, so as to permit said idler wheels to adjust for both pitch and roll.

16. (Previously Presented) The track assembly of Claim 6, wherein said first tandem arm and first idler wheel structure pivot in a first plane, and wherein said idler wheel structure comprises a second pivot axis for pivoting in a second plane which is perpendicular to said first plane.

17. (Previously Presented) The track assembly of Claim 14, wherein said first tandem arm and first idler wheel structure pivot in a first plane, and wherein said idler wheel structure comprises a second pivot axis for pivoting in a second plane which is perpendicular to said first plane.

18. (Currently Amended) A track assembly for distributing weight of an implement frame, the track assembly comprising:
a wheel frame adapted for supporting an implement frame;
an arm attached to an axle positioned in said wheel frame, said axle comprising a first pivot axis for rocking of said arm generally in a first plane;

a first wheel positioned at one end of said wheel frame and operably connected to said wheel frame by said first tandem arm;

a second wheel operably connected to said wheel frame;

an idler wheel structure supported by said arm such that said idler wheel structure and said first wheel rock about said first pivot axis in said first plane, said idler wheels structure having a second pivot axis for rocking of said idler wheel structure in a second plane which is perpendicular to said first plane; and

a continuous ground-engaging belt trained around said first and second wheels, said idler wheel structure being in contact with said continuous ground-engaging belt to maintain a desired distribution of weight of said implement frame.

19. (Cancelled)

20. (New) A track assembly for distributing weight of an implement frame, the track assembly comprising:

a wheel frame adapted for supporting an implement frame;

a first tandem arm directly connected to an axle positioned in said wheel frame forming a pivot member for rocking generally in a vertical plane about a first pivot axis;

a first wheel positioned at one end of said wheel frame and operably connected to said wheel frame by direct attachment to a first end of said first tandem arm and a second wheel operably connected to said wheel frame;

a continuous ground-engaging belt trained around said first and second wheels and defining an upper run and a lower run, said lower run in contact with the ground; and

a first idler wheel structure supported by a second end of said first tandem arm, the pivot member being positioned between the first end and the second end of the first tandem arm such that said first idler wheel structure and said first wheel rock about said first pivot axis in a reciprocating manner to maintain a desired distribution of weight between said first wheel and said first idler wheel structure, said first idler wheel structure further comprising a third wheel and fourth wheel connected by a first axle and a fifth wheel and sixth wheel connected by a second axle, said first and second axles running through said first idler wheel structure, said third, fourth, fifth, and sixth wheels being in contact with said lower run between the first and second wheels.

21. (New) The track assembly as set forth in claim 1, further comprising: the front tandem arm idler wheel further comprising a third wheel and fourth wheel connected by a first axle; the rear tandem arm idler wheel further comprising a fifth wheel and sixth wheel connected by a second axle; and said third, fourth, fifth, and sixth wheels being in contact with said lower run between the first and second wheels.

22. (New) The track assembly as set forth in claim 7, further comprising:

the first idler wheel structure further comprising a third wheel and fourth wheel connected by a first axle;

the second idler wheel structure further comprising a fifth wheel and sixth wheel connected by a second axle; and

said third, fourth, fifth, and sixth wheels being in contact with said lower run between the first and second wheels.

23. (New) The track assembly as set forth in claim 14, further comprising:

the first idler wheel structure further comprising a third wheel and fourth wheel, said third and fourth wheels being in contact with said lower run between the first and second wheels.